

ILLIG reorganizes its production processes with *WinTool*

The standardization of processes has improved the sustainable quality in machine and tool manufacturing. *WinTool* has been assigned a key role in supporting the pursuit of these improvements.



Volker Heidinger, BE, Production Manager of ILLIG Maschinenbau GmbH & Co. KG

ILLIG is a worldwide leading supplier of high performance plants and tools for thermoforming plastics and solutions for the packaging industry. Their production process consists of development, design, construction, manufacturing, assembly and commissioning of complex production lines as well as single components. The owner-managed company maintains its own branches and representatives in over 80 countries.

For more than 60 years ILLIG has provided its customers with cost-effective manufacture of demanding and high precision thermoplastic synthetic molded parts. This requires innovative technology, superior quality and a comprehensive global service.

Standardization in the production

At ILLIG, production is divided into machine- and tool-making. In 2009 it was decided to coordinate tool processes in both manufacturing areas. The production manager, Mr Volker Heidinger, summarizes: "Our building structure and cell production that has emerged over the years



ILLIG RDM 75K air pressure forming machine for manufacture of food cups

- Output 100,000 cups per hour in polystyrene
- 40 cycles per minute with a cup diameter of 3 inches (75mm)

has defined standards in our tooling and supplier selection. With *WinTool* we achieve the best possible transparency concerning tool usage and therefore we can optimize our standardization. Order quantities could also be simply ascertained. Departments can order in *WinTool*, subsequently components can be centrally purchased."

Integrated process flow at ILLIG

Through *WinTool*, NC Programmers can monitor, localize and assemble all available tools. At the click of a mouse tools can be imported directly into CAM Systems, SolidCAM (Machine building) and Pro-NC (Tool making). Tooling plans associated with every NC-Program are automatically exported with *WinTool* and are immediately available to all workers.

Tool data together with measuring instructions and relevant graphics are directly transferred to one of the Zoller measuring instruments in different tool rooms with *WinTool*.

Programming with 3D Simulation

The project leader responsible for the implementation of *WinTool* at ILLIG, Mr Andrew Thomas, concludes in his report about the results: "Thanks to the new, integrated consistent process within the CAD/CAM tooling flow chain — from design to NC-Programming through to pre-setting — there are no more breaks in media and quite often the number of new tool assemblies are reduced by up to 50%.

A 3D machine simulation with realistic tool data reduces trial runs on CNC machines. Our workers tell us that, "if the real tools are identical to, and look like the tooling plans, then we can be sure that there will be no collisions!"

The next phase of improvements includes the integration of *WinTool* together with a controlled tool dispenser system and an SAP interface to enable efficient purchasing.